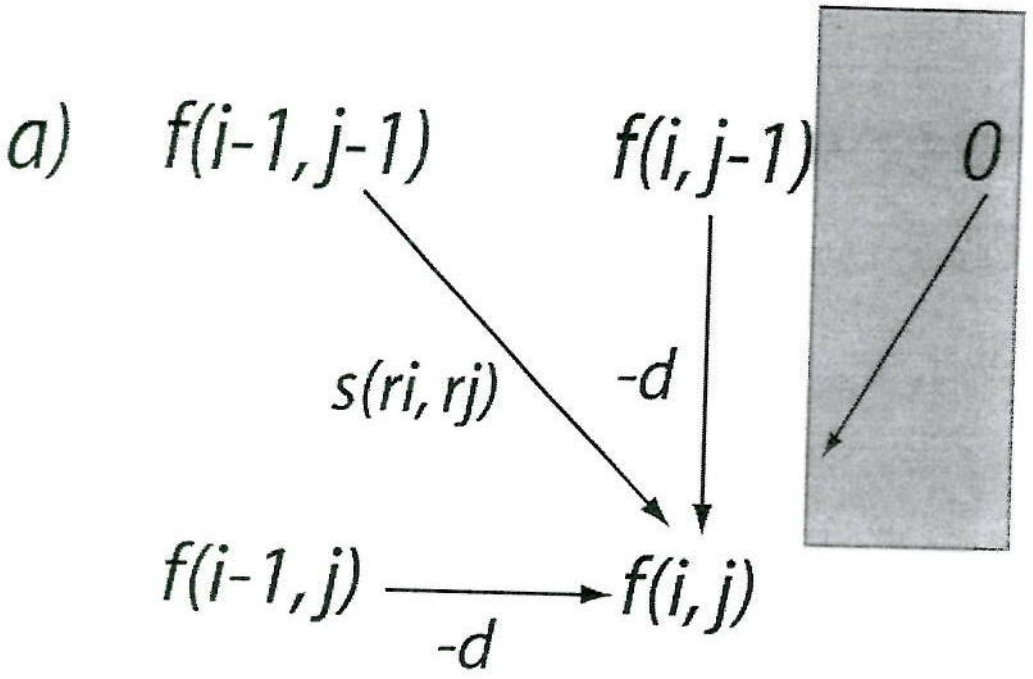
Protein Sequence Comparison and Alignment

Naturally occurring anti-cancer / anti-tumour small peptides in plants:

AP01277 1ED0, Viscotoxin A3 (VtA3, plant, BBMmMOA)	KSCCPNTTGRNIYNACRLTGAPRPTCAKLSGCKIISGSTCPSDYPK
AP01278 Ref, Viscotoxin 1-PS (Vt1-PS, plant)	KSCCPNTTGRNIYNTCRFGGGSREVCARISGCKIISASTCPSDYPK
AP01279 Ref, Viscotoxin A1 (VtA1, plant)	KSCCPNTTGRNIYNTCRLTGSSRETCAKLSGCKIISASTCPSNYPK
AP01280 1ORL, Viscotoxin C1 (VtC1, plant)	KSCCPNTTGRNIYNTCRFAGGSRERCAKLSGCKIISASTCPSDYPK
AP01281 1JMN, Viscotoxin A2 (VtA2, plant)	KSCCPNTTGRNIYNTCRFGGGSRQVCASLSGCKIISASTCPSDYPK
AP01282 Ref, Viscotoxin B (VtB, plant)	KSCCPNTTGRNIYNTCRLGGGSRERCASLSGCKIISASTCPSDYPK
AP01284 Ref, Viscotoxin B2 (VtB2, plant)	KSCCKNTTGRNIYNTCRFAGGSRERCAKLSGCKIISASTCPSDYPK
AP00236 P07504, Pyrularia thionin (Pp-TH, plant)	KSCCRNTWARNCYNVCRLPGTISREICAKKCDCKIISGTTCPSDYPK

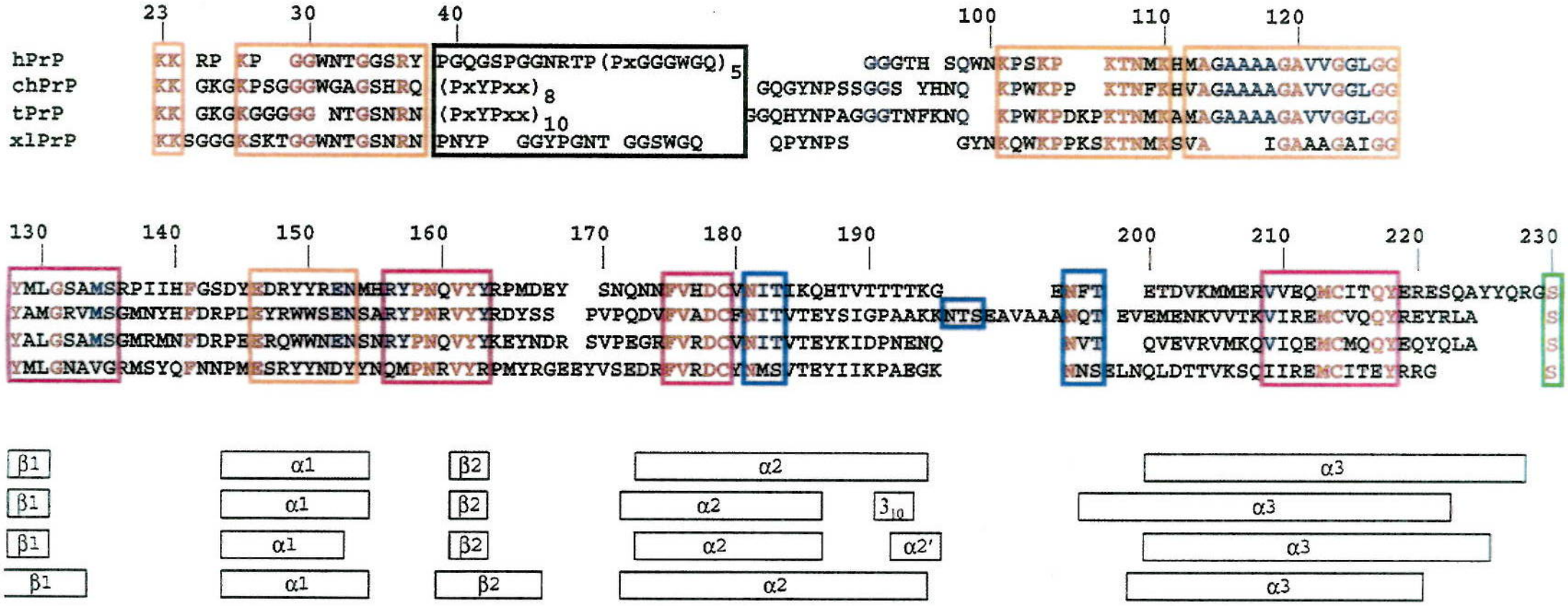
Compare two of these sequences using a scoring matrix.



b)

		A	G	G	T	T	G	C
	0	-1	-2	-3	-4	-5	-6	-7
A	-1	1	0	-1	-2	-3	-4	-5
G	-2	0	2	1	0	-1	-2	-3
G	-3	-1	1	3	2	1	0	-1
T	-4	-2	0	2	4	3	2	1
C	-5	-3	-1	1	3	4	3	2

A	G	G	T	T	G	C
A	G	G	T	-	-	C


23
30
40
100
110
120
hPrP
chPrP
tPrP
xlPrP
(PxGGGWGQ)5
(PxYPxx)8
(PxYPxx)10
130
140
150
160
170
180
190
200
210
220
230
β1
α1
β2
α2
α3
3₁₀
α2′